

# OHIO PUBLIC WORKS COMMISSION

65 East State Street, Suite 312

Columbus, Ohio 43215

(614) 466-0880

## APPLICATION FOR FINANCIAL ASSISTANCE

Revised 6/90

CB516

**IMPORTANT:** Applicant should consult the "Instructions for Completion of Project Application for assistance in the proper completion of this form.

**APPLICANT NAME**  
**STREET**

Village of North Bend

21 Taylor Avenue

**CITY/ZIP**

North Bend 45052

**PROJECT NAME**  
**PROJECT TYPE**  
**TOTAL COST**

Shady Lane Landslide

Reconstruction

\$ 150,000.00

**DISTRICT NUMBER**  
**COUNTY**

2

Hamilton

**PROJECT LOCATION ZIP CODE**

45052

12 FEB 28 P 3: 47

OFFICE OF THE  
COUNTY ENGINEER

### DISTRICT FUNDING RECOMMENDATION To be completed by the District Committee ONLY

**RECOMMENDED AMOUNT OF FUNDING:** \$ 135,000.00

#### FUNDING SOURCE (Check Only One):

State Issue 2 District Allocation  
☐ Grant  
☐ Loan  
☐ Loan Assistance

☒ X

State Issue 2 Small Government Fund  
☐ State Issue 2 Emergency Funds  
☐ Local Transportation Improvement Fund

MLE

#### FOR OPWC USE ONLY

OPWC PROJECT NUMBER: \_\_\_\_\_

OPWC FUNDING AMOUNT: \$ \_\_\_\_\_

# 1.0 APPLICANT INFORMATION

1.1 CHIEF EXECUTIVE  
OFFICER  
TITLE  
STREET

Larry Drew  
Mayor  
21 Taylor Avenue

CITY/ZIP  
PHONE  
FAX

North Bend 45052  
( 513 ) 941 - 0610  
( ) -

1.2 CHIEF FINANCIAL  
OFFICER  
TITLE  
STREET

Gail Montague  
Clerk  
21 Taylor Avenue

CITY/ZIP  
PHONE  
FAX

North Bend 45052  
( 513 ) 941 - 0610  
( ) -

1.3 PROJECT MGR  
TITLE  
STREET

Bill McCormick/Joseph M. Allen Co.  
Village Engineer  
1947 Auburn Avenue

CITY/ZIP  
PHONE  
FAX

Cincinnati 45219  
( 513 ) 721 - 5500  
( 513 ) 721 - 0607

1.4 PROJECT CONTACT  
TITLE  
STREET

Bill McCormick  
Village Engineer  
1947 Auburn Avenue

CITY/ZIP  
PHONE  
FAX

Cincinnati 45219  
( 513 ) 721 - 5500  
( 513 ) 721 - 0607

1.5 DISTRICT LIAISON  
TITLE  
STREET

William Brayshaw, P.E., P.S.  
Chief Deputy Engineer

Hamilton County  
223 W. Galbraith

CITY/ZIP  
PHONE  
FAX

Cincinnati 45215  
( 513 ) 761 - 7400  
( 513 ) 761 - 9127

## 2.0 PROJECT INFORMATION

**IMPORTANT:** If project is multi-jurisdictional in nature, information must be consolidated for completion of this section.

**2.1 PROJECT NAME:**

Shady Lane Landslide

**2.2 BRIEF PROJECT DESCRIPTION - (Sections A through D):**

**A. SPECIFIC LOCATION:**

see attached map

**B. PROJECT COMPONENTS:**

Remove existing pavement to failing base. Implement hillside curtain drain and slope stabilization as per ATEC report. Reconstruct with asphalt concrete.

**C. PHYSICAL DIMENSIONS/CHARACTERISTICS:**

300'L - slide area to be reconstructed

**D. DESIGN SERVICE CAPACITY:**

**IMPORTANT:** Detail shall be included regarding current service capacity vs proposed service level. If road or bridge project, include ADT. If water or wastewater project include current residential rates based on monthly usage of 7,756 gallons per household.

$5,000 \text{ ADT} \times 1.2 = 6,000 \text{ ADT}$

**2.3 REQUIRED SUPPORTING DOCUMENTATION**

(Photographs/Additional Description; Capital Improvements Report; Priority List 5-year Plan; 2-year Maintenance of Effort report, etc.) Also discuss the number of temporary and/or fulltime jobs which are likely to be created as a result of this project. Attach Pages. Refer to accompanying instructions for further detail.

### 3.0 PROJECT FINANCIAL INFORMATION

#### 3.1 PROJECT ESTIMATED COSTS (Round to Nearest Dollar):

a)	Project Engineering Costs:	
	1. Preliminary Engineering	\$ N/A
	2. Final Design	\$ N/A
	3. Construction Supervision	\$ N/A
b)	Acquisition Expenses	
	1. Land	\$ N/A
	2. Right-of-Way	\$ N/A
c)	Construction Costs	\$ 150,000
d)	Equipment Costs	\$
e)	Other Direct Expenses	\$
f)	Contingencies	\$
g)	<b>TOTAL ESTIMATED COSTS</b>	<b>\$ 150,000</b>

#### 3.2 PROJECT FINANCIAL RESOURCES (Round to Nearest Dollar and Percent)

	Dollars	%
a)	Local In-Kind Contributions *	
b)	Local Public Revenues	
c)	Local Private Revenues	
d)	Other Public Revenues	
	1. ODOT	
	2. FMHA	
	3. OEPA	
	4. OWDA	
	5. CDBG	
	6. Other MRF	
e)	OPWC Funds	
	1. Grant	
	2. Loan	
	3. Loan Assistance	
f)	<b>TOTAL FINANCIAL RESOURCES</b>	

\* If the required local match is to be 100% In-Kind Contributions, list source of funds to be used for retainage purposes:

#### 3.3 AVAILABILITY OF LOCAL FUNDS

Indicate the status of all local share funding sources listed in section 3.2(a) through 3.4(c). In addition, if funds are coming from sources listed in section 3.2(d), the following information must be attached to this project application:

- 1) The date funds are available;
- 2) Verification of funds in the form of an agency approval letter or agency project number. Please include the name and number of the agency contact person.

### 3.4 PREPAID ITEMS

#### Definitions:

<b>Cost -</b>	Total Cost of the Prepaid Item.
<b>Cost Item -</b>	Non-construction costs, including preliminary engineering, final design, acquisition expenses (land or right-of-way).
<b>Prepaid -</b>	Cost items (non-construction costs directly related to the project) paid prior to receipt of fully executed Project Agreement from OPWC.
<b>Resource Category -</b>	Source of funds (see section 3.2).
<b>Verification -</b>	Invoice(s) and copies of warrant(s) used to for prepaid costs accompanied by Project Manager's Certification (see section 1.4)

**IMPORTANT:** Verification of all prepaid items shall be attached to this project application.

	<u>COST ITEM</u>	<u>RESOURCE CATEGORY</u>	<u>COST</u>
1)	_____	_____	\$ _____
2)	_____	_____	\$ _____
3)	_____	_____	\$ _____
TOTAL OF PREPAID ITEMS			\$ _____

### 3.5 REPAIR/REPLACEMENT or NEW/EXPANSION

This section need only be completed if the Project is to be funded by SI2 funds:

<b>TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT</b>	\$ 150,000.00	100 %
State Issue 2 Funds for Repair/Replacement (Not to Exceed 90%)	\$ 135,000.00	90
<b>TOTAL PORTION OF PROJECT NEW/EXPANSION</b>	\$ _____	_____ %
State Issue 2 Funds for New/Expansion (Not to Exceed 50%)	\$ _____	_____

### 4.0 PROJECT SCHEDULE

	ESTIMATED START DATE	ESTIMATED COMPLETE DATE
4.1 ENGR. DESIGN	2 / 25 / 92	3 / 31 / 92
4.2 BID PROCESS	4 / 6 / 92	4 / 29 / 92
4.3 CONSTRUCTION	7 / 6 / 92	8 / 31 / 92

## 5.0 APPLICANT CERTIFICATION

The Applicant Certifies That:

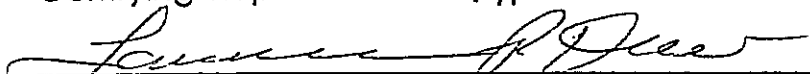
As the official representative of the Applicant, the undersigned certifies that: (1) he/she is legally empowered to represent the applicant in both requesting and accepting financial assistance as provided under Chapter 164 of the Ohio Revised Code and 164-1 of the Ohio Administrative Code; (2) that to the best of his/her knowledge and belief, all representations that are a part of this application are true and correct; (3) that all official documents and commitments of the applicant that are a part of this application have been duly authorized by the governing body of the Applicant; (4) and, should the requested financial assistance be provided, that in the execution of this project, the Applicant will comply with all assurances required by Ohio law, including those involving minority business utilization, Buy Ohio, and prevailing wages.

**IMPORTANT:** Applicant certifies that physical construction on the project as defined in this application has not begun, and will not begin, until a Project Agreement on this project has been issued by the Ohio Public Works Commission. Action to the contrary is evidence that OPWC funds are not necessary to complete this project.

**IMPORTANT:** In the event of a project cost overrun, applicant understands that the identified local match share (sections 3.2(a) through 3.2(c)) will be paid in full toward completion of this project. Unneeded OPWC funds will be returned to the funding source from which the project was financed.

Lawrence P. Drew, Mayor

Certifying Representative (Type Name and Title)

 2-26-82  
Signature/Date Signed

Applicant shall check each of the statements below, confirming that all required information is included in this application:

<u>  X  </u>		A five-year Capital Improvements Report as required in 164-1-31 of the Ohio Administrative Code and a two-year Maintenance of Local Effort Report as required in 164-1-12 of the Ohio Administrative Code.
<u>  X  </u>		A registered professional engineer's estimate of useful life as required in 164-1-13 of the Ohio Administrative Code. Estimate shall contain engineer's <u>original seal and signature</u> .
<u>  X  </u>		A registered professional engineer's estimate of cost as required in 164-1-14 and 164-1-16 of the Ohio Administrative Code. Estimate shall contain engineer's <u>original seal and signature</u> .
<u>  X  </u>		A certified copy of the legislation by the governing body of the applicant authorizing a designated official to submit this application and to execute contracts.
<u>  X  </u>	YES	A copy of the cooperation agreement(s) (for projects involving more than one subdivision or district).
<u>  X  </u>	N/A	
<u>  X  </u>	YES	Copies of all invoices and warrants for those items identified as "pre-paid" in section 4.4 of this application.
<u>  X  </u>	N/A	

## 6.0 DISTRICT COMMITTEE CERTIFICATION

The District Integrating Committee for District Number 2 Certifies That:

As the official representative of the District Public Works Integrating Committee, the undersigned hereby certifies: that this application for financial assistance as provided under Chapter 164 of the Ohio Revised Code has been duly selected by the appropriate body of the District Public Works Integrating Committee; that the project's selection was based entirely on an objective, District-oriented set of project evaluation criteria and selection methodology that are fully reflective of and in conformance with Ohio Revised Code Sections 164.05, 164.06, and 164.14, and Chapter 164-1 of the Ohio Administrative Code; and that the amount of financial assistance hereby recommended has been prudently derived in consideration of all other financial resources available to the project. As evidence of the District's due consideration of required project evaluation criteria, the results of this project's ratings under such criteria are attached to this application.

William W. Brayshaw, Chairman, District 2 Integrating Committee  
Certifying Representative (Type Name and Title)

William W. Brayshaw 4-20-92  
Signature/Date Signed

# VILLAGE OF NORTH BEND

21 Taylor Avenue  
North Bend, Ohio 45052  
(513) 941-0610

## 5 YEAR CAPITAL IMPROVEMENT PLAN VILLAGE OF NORTH BEND

1992	Shady Lane Slip Harrison Avenue Rehab	MRF/Issue II CDBG/Issue II
1993	Symmes Avenue Reconstruction	Local/Issue II
1994	Ohio Avenue Reconstruction	CDBG/Issue II
1995	Miami Avenue Reconstruction	MRF/Issue II
1996	Main Street Reconstruction	Local/Issue II



# VILLAGE OF NORTH BEND

21 Taylor Avenue  
North Bend, Ohio 43052  
(513) 941-0610

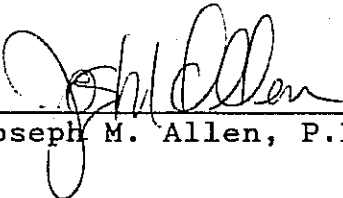
## VILLAGE OF NORTH BEND 2 YEAR LOCAL MAINTENANCE EFFORT

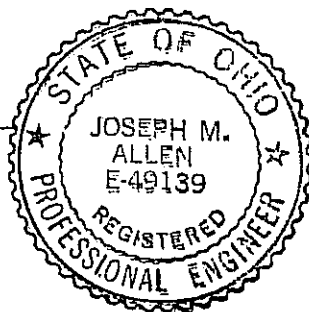
1989	Shady Lane Slip Phase I (MRF)	\$350,000
1990	Crack Sealing Program	\$ 15,000
	Sidewalk Program (Local)	\$ 15,000
1991	Crack Sealing Program	\$ 12,500
	Street Patch Program (Local)	\$ 10,000

ENGINEER'S ESTIMATE  
SHADY LANE  
NORTH BEND

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Excavation	CY	11,000	1.00	11,000
Embankment	CY	10,300	2.50	25,750
Imported Material	CY	700	10.00	7,000
Full Depth Asphalt Course	CY	250	60.00	15,000
18" Storm Drain	LF	250	40.00	10,000
12" Storm Drain	LF	200	30.00	6,000
8" Underdrain	LF	400	10.00	4,000
Catch Basin's	EA	4	1,000.00	4,000
Geo-Grid Filter Fabric	SY	2,200	5.00	11,000
Maintain Traffic	LS	1	10,000.00	10,000
Testing	LS	1	15,000.00	15,000
Layout	LS	1	20,000.00	20,000
Sedimentation Retention	LS	1	11,250.00	11,250

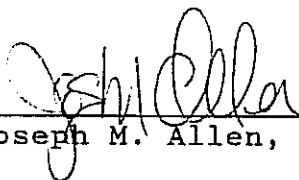
Construction Cost.....\$150,000.00

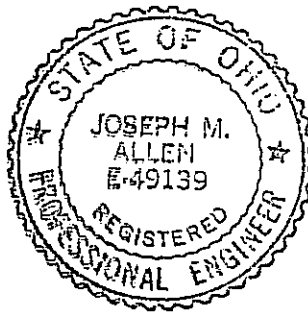
  
Joseph M. Allen, P.E.



USEFUL LIFE EXPECTANCY CERTIFICATION

This is to certify that upon successful completion of the Shady Lane Slip Project, the useful life expectancy will be 20 years.

  
\_\_\_\_\_  
Joseph M. Allen, P.E.



# VILLAGE OF NORTH BEND

Resolution No. 1992-1

Resolution to participate AND Apply  
For Financial Assistance from the  
Ohio Public Works Commission

It is hereby resolved by the council  
of the Village of North Bend, & duly elected  
members concurring, that the Village of  
North Bend:

1. Submit an application for financial  
assistance to the Ohio Public Works Commission  
under State Issue 2.

2. Enter into an agreement with the Ohio  
Public Works Commission, and the Mayor is hereby  
authorized to sign an agreement with the Ohio  
Public Works Commission for financial assistance

Dated: February 10, 1992

Lawrence Law  
Mayor

Joy Ferraris

Peter Mayall

Margaret Kruger

Shirley Smith

Gail Montague  
Clerk

I hereby certify that the foregoing is a true & accurate  
copy of the original resolution #1992-1 passed February 10, 1992.  
x Gail Montague, Clerk

# VILLAGE OF NORTH BEND

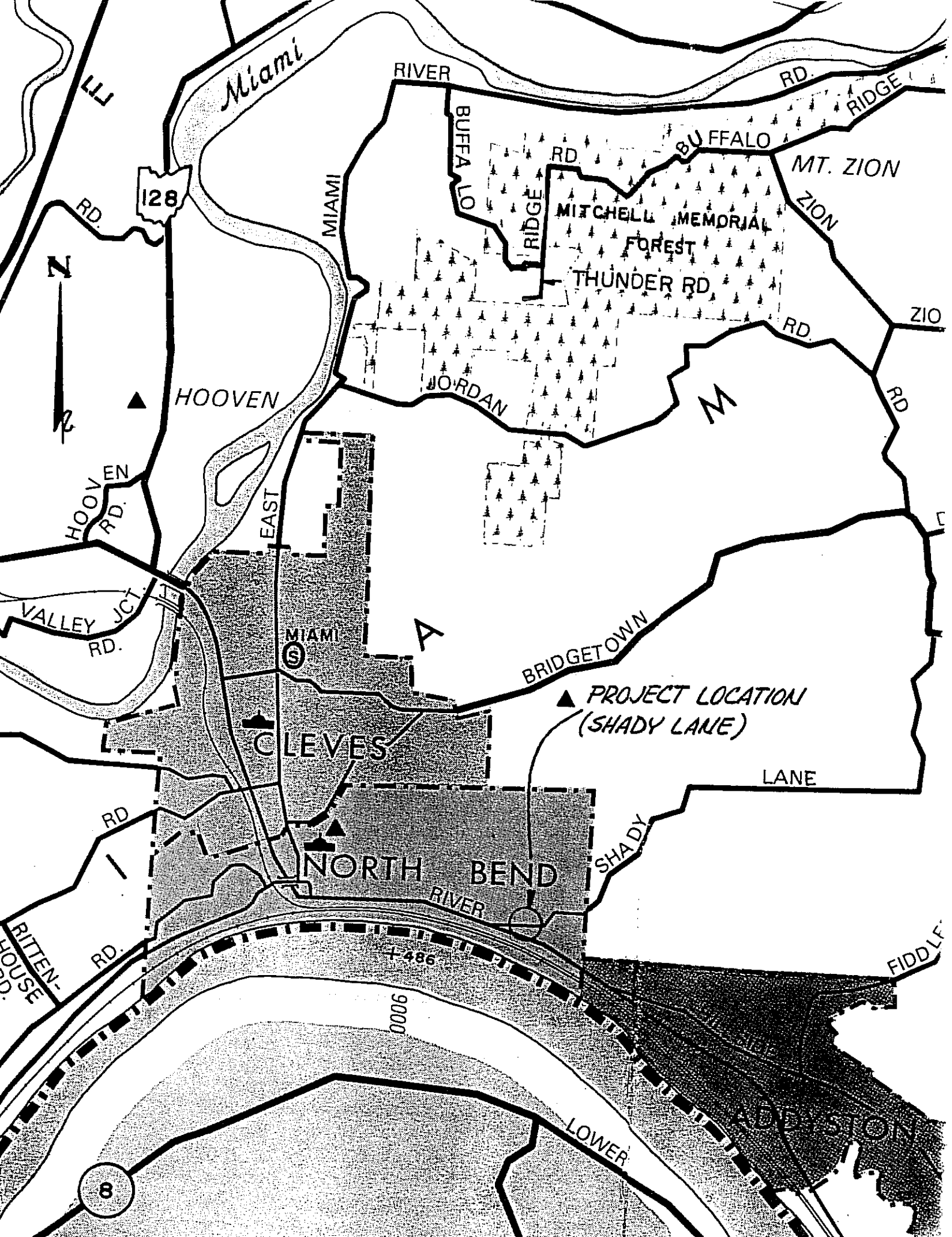
21 Taylor Avenue  
North Bend, Ohio 45052  
(513) 941-0610

## STATUS OF FUND REPORT

The Village of North Bend has been granted Emergency Municipal Road Fund Monies for its participation, from the Hamilton County Engineer's Office with concurrence from the Hamilton County Board of Commissioners, for the Shady Lane Slip Project for submittal for Issue II.

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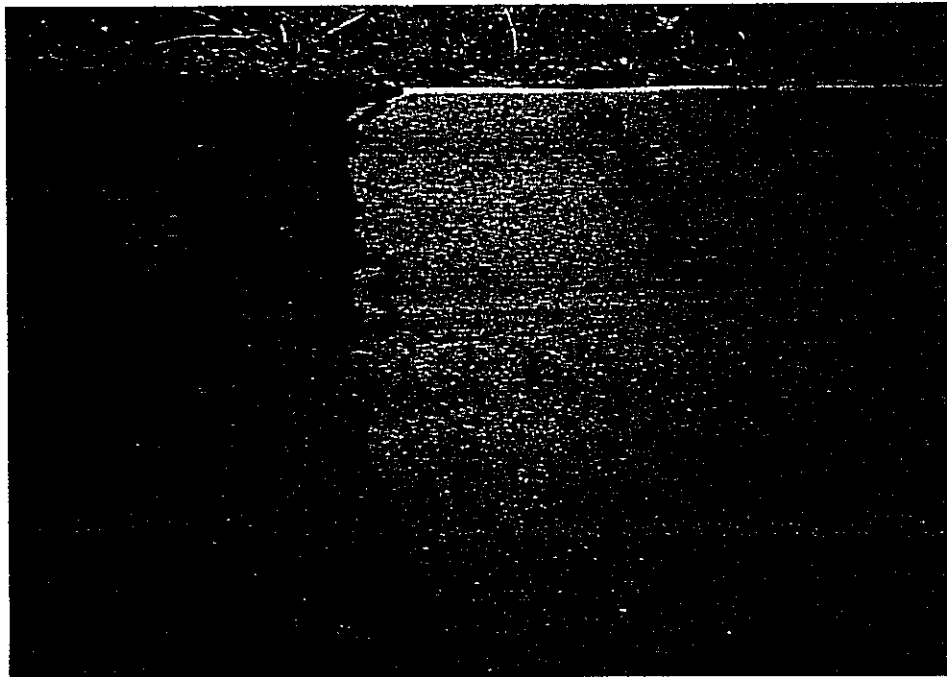
Lawrence P. Drew, Mayor



Shady Lane  
North Bend



Area of Patching Where  
Slipping has Occurred



Pavement Failing in an  
Area Where Patching has  
already been Completed

Shady Lane  
North Bend



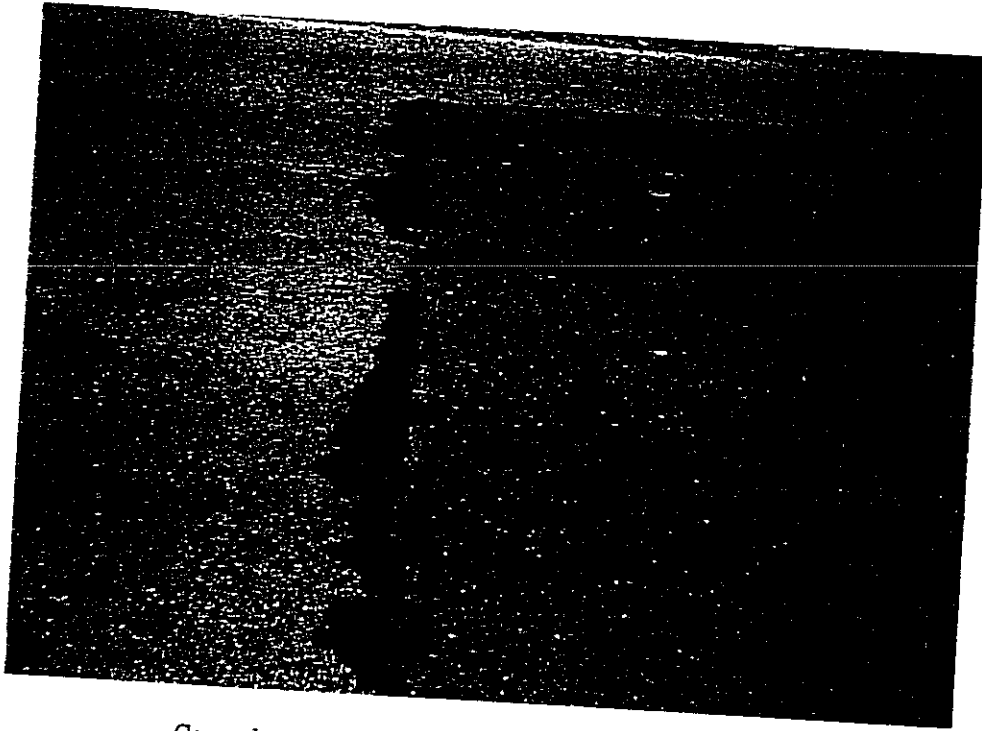
Upslope Hillside on Shady Lane



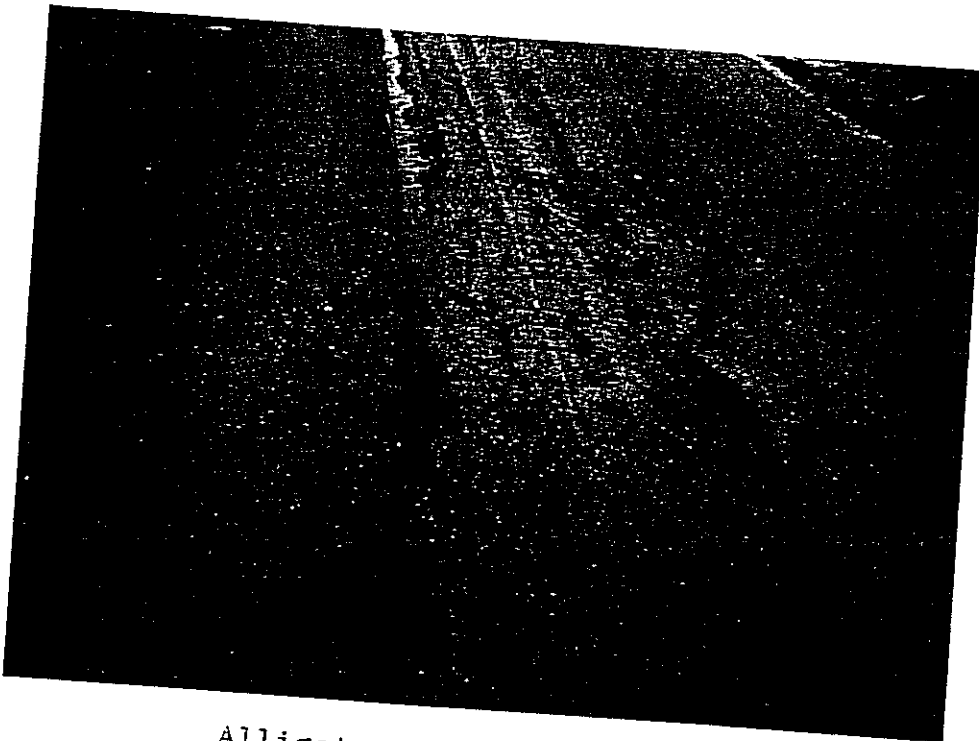
Pavement Sliding as Evidenced  
by Width of Crack



Shady Lane  
North Bend



Crack Starting to Open in Slip Area



Alligator Cracking in Slip Area

## GEOTECHNICAL INVESTIGATION AND REPORT

JOHN M. NIEHAUS, INC.  
SHADY LANE LANDSLIDE  
NORTH BEND, OHIO

ATEC FILE NUMBER: 22-03073

### 1.0 INTRODUCTION

This report presents the results of a geotechnical investigation and soils evaluation for the Shady Lane landslide. This study was performed in accordance with our written proposal dated May 3, 1990, and was authorized by Mr. John Niehaus.

The purpose of the investigation was to determine the types of subsoils present at the proposed site to the depths which would significantly affect the roadway, to evaluate the engineering characteristics of the subsurface materials, and to determine remedial measures applicable to the slope movement and subsequent road failure.

The scope of this investigation included a review of available geologic and soils data for the project area, a comprehensive subsurface investigation at the site in question consisting of four (4) standard soil test borings located as shown on the attached Boring Location Plan (Figure 1), field and laboratory soil testing, and an engineering analysis and evaluation of the subsurface conditions encountered at this site."

Site elevation data referred to herein was interpolated from a topographic survey of the area supplied to us by the client.

## 2.0 PROJECT AND SITE CHARACTERISTICS

The project site is located on the south side of Shady Lane, approximately 650 feet east of River Road (U.S. 50), in North Bend, Ohio. The landslide area is estimated to be about 225 feet long along Shady Lane, extending from just west of Boring #1 to just east of Boring #3. In the central portion of the slide area, the pavement has failed and has been patched, and the asphalt curb is pulling away from the edge of the road. Within about 35 feet of the roadway at this location, there are several trees on the hillside that are leaning noticeably downhill, as is the power pole near Boring #1. At least one old building foundation is present on the slope near the road in this area. On the hillside to the southwest of the slide, there are several "S" and "J" bent trees indicating old land movements in the area. A drilled pier retaining wall is located along the south side of Shady Lane between the subject site and U.S. 50, also indicating a history of landsliding in this locale.

The site lies within a minor valley just to the north of its juncture with the Ohio River valley. Shady Lane runs along the north slope of this minor valley, and was apparently formed by cutting along the high (north) side of the road and filling on the low (south) side. The slope on the south side of the road, the subject of this study, is approximately 20 feet high at the east end of the project, and 40+ feet high at the west end. The hillside has an average gradient of about 3.0 horizontal to 1.0 vertical (3.0H:1.0V), but is in some places much steeper near the top of the slope. On the

uphill side of the road, the grade rises sharply at steeper than a 2.0H:1.0V slope, eventually flattening to greater than 3.0H:1.0V. The roadway has a gradient of about 5 percent, uphill to the east, at this location.

Drainage in the area consists of surface runoff over the road and subject slope. A large storm culvert collects water from uphill to the north and east of the project, crossing the road approximately 40 feet east of Boring #3, where it empties into a storm sewer that follows the valley downward to the southwest. The junction of this culvert and storm sewer has failed, which has resulted in a severe loss of ground at this point.

### 3.0 GENERAL SUBSURFACE CONDITIONS

Using standard rotary drill equipment, ATEC made a total of four (4) standard soil test borings for this investigation at the locations shown on the Boring Location Plan, Figure 1 in the Appendix to this report. The soil samples were returned to our soil mechanics laboratory in Cincinnati, Ohio, for the required analyses, testing and evaluation.

The subsurface soil profile and groundwater conditions are described in detail on the boring logs and shown graphically on the Generalized Soil Profile, Figure 2, in the Appendix to this report, but in general terms consist of the following.

#### 3.1 Soil Profile

The two borings that were performed within the roadway (Borings #3 and #4) penetrated 3 inches of asphaltic pavement underlain by 12 inches of granular base material. Boring #1, which was performed in a grassy area, encountered 6 inches of topsoil at the surface.

Aside from the surficial materials described above, the subsurface materials at this site can be divided into four broad categories, these being fills, colluvial silty clays, residual silty clay, and weathered shale and limestone bedrock.

Fills or probable fills were encountered in Borings #1, #2 and #3 which were performed along the south side of the road near the crest of the slope. These fills extend to depths of 5.0 to 6.0 feet, and consist of brown or brown and gray sandy clay or silty clay. Minor components of the fill are cobbles, gravel, asphalt pieces and organic matter. The fill is generally medium stiff to stiff in compactness. Standard Penetration Test (N) values in the fill range from 5 to over 100 blows per foot (bpf). The high N values are believed due to the encounter of cobbles or large debris within the fill soil matrix. The fills are generally in a moist condition, with natural moisture contents in the 7 to 24 percent range.

Beneath the fill at Borings #1, #2 and #3, and below the pavement at Boring #4, brown to olive-brown silty clays were encountered. These soils grade into soft olive weathered shale below depths of about 12 feet in Borings #1 through #3, and below about 5 feet deep in Boring #4. The upper 5 feet of these silty clays are very weathered and lack the horizontal striations of the lower materials. It is likely that the upper 5± feet of natural soil is colluvium, i.e. soil that has been transported down from higher elevations by the force of gravity. These colluvial or very weathered residual soils are stiff to hard in consistency with N values of 10 to 100+ bpf being recorded. The underlying residual silty clays are very stiff to hard in consistency with N values of 100+ bpf. Some of the high N values in this

material are due to the encounter of limestone layers interbedded with the residual soils and soft weathered shale.

Underlying the overburden materials described above, olive and gray shale and interbedded limestone was encountered, which grades to a gray shale and limestone at about 15± feet deep in Borings #1 and #2. A core sample of the gray shale and limestone obtained from 18 to 23 feet deep in Boring #2 indicates that the shale makes up 85 percent of the formation at this location, and that the bedrock is of poor structural quality as indicated by a Rock Quality Designation (RQD) value of 23. Published geological information for this area identifies this bedrock as being of the Kope Formation, Ordovician System.

### 3.2 Groundwater Conditions

Observations concerning groundwater were made during, at completion of, and some time after the drilling operations. In no instance was any groundwater noted in the open boreholes, nor were any wet soil samples noted. Water was present in the slope inclinometer casing which was installed in Boring #2 at about 11 feet below the ground surface one month after its installation. However, this water is probably the remnants of that used to facilitate rock coring in this boring.

The observed groundwater level depends on normal variations in precipitation and surface runoff amounts. The true static groundwater level can only be determined through observations made in cased holes over a long period of time. Ground and/or surface water should be addressed during the construction of the proposed corrective measures for the project, as will be discussed in Section 5.0 of this report.

#### 4.0 LOCAL GEOLOGIC EFFECTS ON LANDSLIDING

Numerous landslides have occurred in colluvium overlying the Kope Formation bedrock (as found at this site), and to a lesser degree the lower Fairview formation, in the Greater Cincinnati area. The failures can generally be categorized as either a deep-seated failure where the failure surface is at the colluvium-bedrock interface, or a rapid flow or mudslide which may occur on the steeper hillsides. Aside from these obvious movements, long term "creep" of overburden on hillsides in this area is known to occur. These rates of creep movement may be on the order of a few hundredths of an inch per year, or less. The first type of slide mentioned is most prevalent in our area, and often occurs over a long period of time. Total observed movements over the span of a year may not exceed 2 to 3 inches. Landslides have occurred on slopes over the Kope Formation that are inclined as little as 8 to 11 degrees (a 15 to 20 percent gradient). Fairview hillsides will typically stand as steep as 20 to 30 degrees.

The mechanics of these landslides are not completely understood at this time, but many agree that groundwater is an integral factor. It is believed that groundwater seepage along the soil/rock interface induces uplift pressures on the soil mass, reducing the effective shearing resistance along the potential failure plane. Also, added groundwater may add to the total weight of the soil mass, and induce hydrostatic pressures against the soil due to it's migration into tension cracks or man-made cuts uphill, both of which will add to the driving force of the slide. The fact that landslides are more frequent after periods of significant precipitation is probably due to one or more of the above factors.

It is also believed that the slide mechanics are related to the structure of the highly overconsolidated, weathered

shales. Furthermore, the Fairview Formation hillsides generally being relatively steep, would not allow a buildup of a substantial thickness of colluvium as would the less steep Kope Formation slopes, thus keeping the potential landslide driving forces to a minimum. Also, the presence of a substantially lesser amount of limestone layers in the Kope Formation bedrock may result in a lower shearing resistance in those materials than in Fairview Formation bedrock.

As mentioned in Section 2.0, the evidence of slope instability at this site is obvious. The slopes here are substantially steeper (i.e. gradients of 33 percent or steeper versus 15 to 20 percent) than others known to be unstable given similar geologic conditions. The activities of man in the form of the cut and fill performed for the original road construction have further aided in the instability. Subtle changes in drainage, and thus groundwater conditions may also be of import, but are difficult to rigorously analyze.

## 5.0 GEOTECHNICAL CONCLUSIONS AND RECOMMENDATIONS

Based upon our analysis of the soil conditions at this site, the following conclusions were reached, and the following recommendations were developed. The desired characteristics of the completed project were taken into consideration in light of the existing conditions, as was our experience with similar cases. It should be noted that the extent and mode of failure of landslides are highly time dependent, and the following recommendations are felt to be appropriate at this time. Should site conditions other than those previously described be observed prior to, or during the implementation of corrective measures, the soils engineer should be advised of such so that this report may be reviewed in light of the new information.



### 5.1 Analytical Procedures/General Discussion

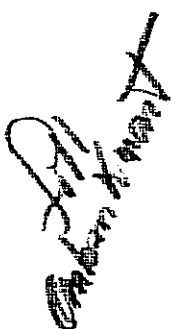
In order to identify the landslide failure surface, a slope inclinometer casing was installed in Boring #2, which is located on the downhill side of the road, near the center of the damaged roadway section - and presumably the landslide. Deformation measurements have been taken in the inclinometer at approximately one and four week intervals since its installation. These readings are displayed on the Graphs of Deflection in the Appendix to this report. From this data it appears that the landslide is a translating type failure, the base of which is at approximately 12 feet below the ground surface at this location. The slide is estimated to have advanced about one-third of an inch in the month following the installation of the inclinometer.

Given the subsurface stratigraphy defined in our soil borings and the depth of the landslide failure plane as determined from the slope inclinometer, we performed a computer analysis utilizing the STABL4 Slope Stability program developed by Purdue University in order to locate the probable extent of the landslide, and to back-calculate the soils' engineering parameters for the analysis of potential remedial measures. The results of the computer slope stability analysis is illustrated on Figure 3 in the Appendix.

Based on the above data, we believe that the landslide consists of unstable fills and colluvium translating over stable natural soils or bedrock. It is our opinion that the instability is the result of the added weight of the fill at the top of hill, which hastened the movement of already marginally unstable colluvium over the more competent residuum or bedrock. The steepness of the upper portion of the slope has also likely contributed to

its failure. The degree to which site drainage and groundwater may have affected the slope's stability cannot be evaluated at this time. However, water infiltrating into the slope may have well lessened the stability of the slope, and should be taken into consideration in the design of any corrective measures. Such water infiltration would adversely affect the embankment stability by increasing the weight of the fill, adding seepage forces and hydrostatic pressures to the slide driving force, and weakening the soil shear strengths.

## 5.2 Recommended Remedial Measures

 It is our opinion that the roadway can be stabilized by reconstructing the supporting fill embankment. Although this will require a relatively significant amount of earthwork and disruption to traffic, we feel that this is a viable solution. Also, we suggest that the use of a drilled pier retaining wall be considered, and the final choice between the two alternatives be made on an economic comparison, which is beyond the scope of this study.

A third possible solution, the construction of a keyway/buttress of select granular fill within the failing slope was also considered for this study. However, due to the great amount of expensive imported granular fill required for this alternative, it was judged to be less economically feasible than the other solutions considered.

Based on our assessment of the problem as previously discussed, we make the following recommendations for the two recommended alternatives.

✓ 5.2.1 Reconstruction of Embankment/Slope

We recommend that the existing fill embankment materials and natural soils be removed to the limits shown on Figure 4 in the Appendix. The embankment should then be reconstructed by replacing the excavated soils with controlled, engineered fill. This treatment should extend from at least the location of Boring #3 to 40 feet west of Boring #1. The key points in this scheme are to bench the new fill into the hard, undisturbed, natural silty clay residuum or bedrock, and to maintain a finished slope of no steeper than 3.0H:10V. We recommend that the minimum bench width be 8 feet, and the maximum bench height be 2 feet for this project. The excavation should proceed from the south side of the road, progressing in a southerly, and downhill direction. In no case should any attempt be made to excavate at the toe of the slope first.

A curtain drain should be constructed at the juncture between the new embankment and existing soils, as shown in Figure 4. This drain should consist of a 4 inch diameter perforated pipe surrounded and backfilled with washed pea-sized gravel, which is in turn encased in a filter-type geotextile. The zone of granular backfill should have a minimum width of 18 inches, and should be capped with 2 feet of compacted clay and/or topsoil at the surface. The perforated pipe should have a proper outlet to the creek or storm sewer.

All earthwork should be performed in accordance with the enclosed recommendations in Section 6.0, or local governmental specifications if they are more stringent, as determined by the soils engineer. It

appears as though the excavated material may be reused for structural fill, however, unacceptable materials may exist at locations intermediate to our boring locations. Care should be taken to screen any recycled soils, or off-site borrow materials for contamination with unacceptable materials such as rubble, topsoil, etc. All topsoil and vegetation should be stripped from the construction area at the onset of construction. Topsoil may only be incorporated into the upper 1.0 foot of the outer face of the new embankment slope, or in other non-structural areas.

We recommend that the surface drainage for the site be improved as much as possible. Stormwater should not be allowed to traverse the road and/or flow over the new embankment, but rather should be directed toward catch basins and the formal stormwater system where possible. Vegetative cover should be established over the slope immediately after construction to control surface erosion.

#### 5.2.2 Drilled Pier Retaining Wall

This alternative would also be applicable to the affected area. The drilled pier wall could be located just outside the berm of the road, and would act as a cantilever to support the unstable fill and colluvium by passive resistance resulting from penetration into the underlying bedrock. Based on previous experience, and for cost estimating purposes only, it appears that 30 inch diameter piers socketed 10± feet into the shale and limestone bedrock, with an overall length of 25± feet, would be required. Actual pier design parameters should be determined from a rigorous engineering analysis,

and will depend on pier spacing (typically 5 to 6 feet), and other factors.

As with the embankment reconstruction alternative, proper surface drainage should be maintained. In addition, free draining granular fill should be used behind the required lagging for the pier wall to alleviate excess hydrostatic pressures. Various types of lagging could be used between the piers, such as precast concrete panels, heavy treated timber, etc. The lagging should extend to at least 2 feet beneath the identified fill in the soil profile to insure positive retainage of said fill.

Figure 5 in the Appendix illustrates the design criteria for a drilled pier retaining wall. The structural design of the pier wall is beyond our scope of work for this phase of the project. However, if requested, we would be glad to provide further design assistance to the client or his structural engineer.

Note that a drilled pier retaining wall could not positively prevent material downhill from the pier wall from continued movement. However, the driving forces against these materials would be greatly reduced, lessening the likelihood of such movement.

## 6.0 RECOMMENDED EARTHWORK PROCEDURES

### 6.1 Site Preparation

All vegetation, topsoil and other organic material or miscellaneous fill and debris should be removed from the construction areas prior to building or placing any fill on the site. After the completion of stripping and

undercutting operations, the exposed subgrade areas should be proofrolled with suitable heavy equipment, preferably a 20 to 30-ton loaded dump truck. Any soft yielding areas delineated by the proofrolling should be undercut or otherwise stabilized as directed by the soils engineer.

## 6.2 Excavation

It is anticipated that there will be minimal difficulty experienced in excavating the site for this project with conventional equipment and methods. Unless specified otherwise, all temporary cut slopes in natural materials shall be no steeper than 1.0 horizontal to 1.0 vertical. All temporary cut slopes in existing fills should be no steeper than 1.5 horizontal to 1.0 vertical. In any case, all excavations should be properly laid back or braced in accordance with Occupational Safety and Health Administration (OSHA) requirements.

## 6.3 Fill

Once the embankment slope has been undercut and the subgrade has been properly prepared, fill may be placed in order to attain desired final grades. In general, any non-organic naturally-occurring soils or processed materials of the proper gradation can be used for structural fill. The fill should contain no pieces whose greatest dimension is larger than the thickness of the lift being placed. If fill construction takes place during the winter months, care should be taken so as not to place fill over frozen soil, nor should frozen materials be used within the fill.

The fill should be placed in lifts of uniform thickness. The lift thickness should not exceed that which can be

properly compacted throughout its entire depth with the equipment available. We recommend that structural fills within the roadway embankment be compacted to 100 percent of the maximum Standard Proctor dry density. For proper and timely construction of the fills, the soils should be placed at or near the optimum moisture content as determined by the specified Proctor test. Suitable equipment for either aerating or adding water to the fill materials should be available as the soil moisture and weather conditions dictate.

In general, it is recommended that fills supporting pavement extend a minimum of 5 feet beyond the pavement edge. Any fills placed on existing slopes that are steeper than 10 horizontal to 1 vertical should be properly benched into the existing slope as directed by the soils engineer. Unless otherwise authorized, permanent embankment slopes for earth fills constructed in accordance with the recommendations in this report should be no steeper than 3 horizontal to 1 vertical.

It is recommended that this firm be retained to perform continuous review of any construction of the soils related phases of this project. Otherwise, we assume no responsibility for construction compliance with the design concepts, specifications, or our recommendations. As part of this review, field density tests should be performed as frequently as necessary to assist in the evaluation of the fill with respect to the above recommendations.

## 7.0 FIELD AND LABORATORY INVESTIGATIONS

### 7.1 Scope

Field investigations to determine the general engineering characteristics of the foundation materials for this project included a reconnaissance of the site, performing soil test borings located approximately as shown on the enclosed Boring Location Plan, and making standard penetration tests on the in-situ soils. The apparent groundwater level at each boring location was also determined.

The types of subsurface materials encountered in the test borings have been visually classified by ATEC engineering staff, and are described in detail on the boring logs. The results of the field penetration tests, strength tests, water level observations, and laboratory water content and Atterberg Limit determinations, are present on the boring logs in numerical form. Representative samples of the soils encountered in the field were placed in sample jars and are now stored in our laboratory for further analysis, if desired. Unless we are notified to the contrary, all samples will be disposed of 30 days from the date of this report.

### 7.2 Field Investigations

The soil borings were performed with an ATV-mounted drilling rigs equipped with rotary heads. Conventional hollow-stem augers were used to advance the holes. Representative samples of the in-situ soils and rock were obtained employing split-barrel and diamond core barrel sampling procedures in accordance with ASTM Procedures D-1586 and D-2113, respectively.



### 7.3 Laboratory Investigations

In conjunction with the field investigations, a supplemental laboratory investigation was conducted to determine additional pertinent engineering characteristics of the subsurface materials necessary for analyzing the existing embankment and proposed improvements. The laboratory testing program included supplementary visual classification tests on all samples. Atterberg Limits, unconfined compressive strength and natural water content tests were made on selected samples of soil. All phases of the laboratory investigation were conducted in general accordance with applicable ASTM specifications and procedures.

### 8.0 SUMMARY

An exploration and evaluation of the subsurface conditions has been conducted at the site of a landslide on Shady Lane in North Bend, Ohio for John Niehaus, Inc. Probable causes of the landslide and suggested corrective measures have been discussed. In summary, it is believed that the instability of the slope is confined to the fill and colluvial soils within 12± feet of the ground surface. We have recommended two (2) alternates for remediation, namely reconstruction of the embankment slope or a drilled pier retaining wall.

The exploration and analysis of the subsurface conditions at the subject site, as reported herein, are considered in sufficient detail and scope to form a reasonable basis for the final design of either remedial alternative, and an economic comparison of the two recommended alternative courses of action.

## 9.0 LIMITATIONS OF STUDY

Our recommendations for this project were developed utilizing soils information obtained from the test borings that were made at the proposed site. At this time we would like to point out that soil test borings only depict the soil conditions at the specific locations and time at which they were made. The soil conditions at other locations on the site may differ from those occurring at the boring locations; however, only minor variations are expected at this particular site.

The conclusions and recommendations herein have been based upon the available soil information and the preliminary design details furnished by a representative of the owner of the proposed project. Any revision in the plans for the proposed construction from those anticipated in this report should be brought to the attention of the soils engineer to determine whether any changes in the recommendations are necessary. If deviations from the noted subsurface conditions are encountered during construction, they should also be brought to the attention of the soils engineer.

The scope of our services does not include any environmental assessment or investigation for the presence or absence of hazardous or toxic materials in the soil, groundwater or surface water within or beyond the site studied. Any statements in this report or on the test boring logs regarding odors, staining of soils or other unusual conditions observed are strictly for the information of our client.

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This company is not responsible for the

conclusions, opinions, or recommendations made by others based upon the data included herein.

Rev. Code Sec. 5705.26

	(1)	(2)	(3)	(4)	(5)	(6)
Fund Type/Classification	Cash Balance as of December 31, 1991	Encumbrances as of December 31, 1991	Advances not Repaid	Carryover Balance Available for Appropriation	Total Amount from all Sources Available for Expenditures	Total Amount Available plus Balances
General Fund Type	XXXX	XXXX	XXX	XXXX	XXXX	XXXX
General Fund	27,629. <sup>00</sup>	5000. <sup>00</sup>	—	17,629. <sup>00</sup>	179,271. <sup>00</sup>	146,910. <sup>00</sup>
Special Revenue Funds	3,559. <sup>00</sup>	500. <sup>00</sup>	—	3059. <sup>00</sup>	34,000. <sup>00</sup>	37,059. <sup>00</sup>
Public Service Funds	11,326. <sup>00</sup>	—	—	11,326. <sup>00</sup>	10,545. <sup>00</sup>	21,871. <sup>00</sup>
Capital Projects Funds	1802. <sup>00</sup>	—	—	1,802. <sup>00</sup>	1,802. <sup>00</sup>	1,802. <sup>00</sup>
Special Assessment Fund	79. <sup>00</sup>	—	—	79. <sup>00</sup>	79. <sup>00</sup>	79. <sup>00</sup>
Enterprise Fund Type	XXXX	XXXX	XXX	XXXX	XXXX	XXXX
Enterprise Funds						
Internal Service Funds						
Fund Type	XXXX	XXXX	XXX	XXXX	XXXX	XXXX
Trust and Agency Funds	547. <sup>00</sup>					547. <sup>00</sup>
Special	136. <sup>00</sup>			136. <sup>00</sup>	5168. <sup>00</sup>	5304. <sup>00</sup>
TOTAL ALL FUNDS	40,138. <sup>00</sup>	5500. <sup>00</sup>	—	34,091. <sup>00</sup>	233,063. <sup>00</sup>	267,622. <sup>00</sup>

ORDINANCE No. 1992-1

## ANNUAL APPROPRIATION ORDINANCE

(VILLAGE)

(Revised Code Sec. 5705.32)

An ORDINANCE to make appropriations for Current Expenses and other Expenditures of the Village of North Bend, State of Ohio, during the fiscal year ending December 31, 1992

Section 1. BE IT RESOLVED by the Council of the Village of North Bend, State of Ohio, that, to provide for the current expenses and other expenditures of the said Village of North Bend during the fiscal year ending December 31, 1992 the following sums be and they are hereby set aside and appropriated as follows, viz:

Section 2. That there be appropriated from the GENERAL FUND:

## PROGRAM I — SECURITY OF PERSONS AND PROPERTY

## Police Law Enforcement

## 210 Personal Services

211 Salaries/Wages \$ 80,000212 Employee Benefits 6,000

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials 30,000

250 Capital Outlay \_\_\_\_\_

Total Police Law Enforcement \$ 116,000

## Fire Fighting, Prevention and Inspection

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits 200.

220 Travel Transportation \_\_\_\_\_

230 Contractual Services 2,000240 Supplies and Materials 2,500

250 Capital Outlay \_\_\_\_\_

Total Fire Fighting, Prevention and Inspection \$ 5,700

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services 6000

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Street Lighting \$ 6000

Civil Defense

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Civil Defense \$ \_\_\_\_\_

Traffic Signals, Signs and Markings

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Traffic Signals, Signs and Markings \$ \_\_\_\_\_

Other Security of Persons and Property

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Security of Persons and Property \$ \_\_\_\_\_

Total Program I — Security of Persons and Property \$ 127,700

## Cemetery

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Cemetery \$ \_\_\_\_\_

## Payment to County Health District

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services 300

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Payment to County Health District \$ 300

## Payment to Human Services Program

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Payment to Human Services Program \$ \_\_\_\_\_

## Other Assistance to the Needy

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Assistance to the Needy \$ \_\_\_\_\_

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Public Health \$ \_\_\_\_\_

Total Program II -- Public Health and Human Services \$ 300.

## PROGRAM III -- LEISURE TIME ACTIVITIES

## Recreation Programs

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Recreation Programs \$ \_\_\_\_\_

## Provide and Maintain Parks

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Provide and Maintain Parks \$ \_\_\_\_\_

## Cultural Facilities

## 210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Cultural Facilities \$ \_\_\_\_\_



211	Salaries/Wages	\$ _____
212	Employee Benefits	_____
220	Travel Transportation	_____
230	Contractual Services	_____
240	Supplies and Materials	_____
250	Capital Outlay	_____
Total Swimming Pool		\$ _____

**Concessions**

210 Personal Services		
211	Salaries/Wages	\$ _____
212	Employee Benefits	_____
220	Travel Transportation	_____
230	Contractual Services	_____
240	Supplies and Materials	_____
250	Capital Outlay	_____
Total Concessions		\$ _____

**Other Leisure Time Activities**

210 Personal Services		
211	Salaries/Wages	\$ _____
212	Employee Benefits	_____
220	Travel Transportation	_____
230	Contractual Services	_____
240	Supplies and Materials	_____
250	Capital Outlay	_____
Total Other Leisure Time Activities		\$ _____

Total Program III — Leisure Time Activities \$ \_\_\_\_\_

**PROGRAM IV — COMMUNITY ENVIRONMENT**

**Community Planning and Zoning**

210 Personal Services		
211	Salaries/Wages	\$ _____
212	Employee Benefits	_____
220	Travel Transportation	_____
230	Contractual Services	_____
240	Supplies and Materials	_____
250	Capital Outlay	<u>500</u>
Total Community Planning and Zoning		\$ <u>500</u>

**Public Housing Projects**

**210 Personal Services**

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

**Total Public Housing Projects** \$ \_\_\_\_\_

**Other Community Environment**

**210 Personal Services**

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

**Total Other Community Environment** \$ \_\_\_\_\_

**Total Program IV -- Community Environment** \$ 500

**PROGRAM V -- BASIC UTILITY SERVICES**

**Electric Utility**

**210 Personal Services**

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

**Total Electric Utility** \$ \_\_\_\_\_

**Gas Utility**

**210 Personal Services**

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

**Total Gas Utility** \$ \_\_\_\_\_

Other Transportation

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Transportation \$ \_\_\_\_\_

Total Program VI — Transportation \$ \_\_\_\_\_

PROGRAM VII — GENERAL GOVERNMENT

Mayor and Administrative Offices

210 Personal Services

211 Salaries/Wages \$ 21,400

212 Employee Benefits 5000

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials 7000

250 Capital Outlay \_\_\_\_\_

Total Mayor and Administrative Offices \$ 33,400

Legislative Activities (Council)

210 Personal Services

211 Salaries/Wages PCB \$ 3950

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Legislative Activities \$ 3950

Mayor's Court

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Mayor's Court \$ \_\_\_\_\_

Clerk, Treasurer

210 Personal Services

211 Salaries/Wages *1000* \$ 5700

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Clerk, Treasurer \$ 5700

Lands and Buildings

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials 15000

250 Capital Outlay 5000

Total Lands and Buildings \$ 20,000

Boards and Commissions

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

*Workman's Corp*  
212 Employee Benefits 6000

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Boards and Commissions \$ 6000

County Auditor's and Treasurer's Fees \$ 1000

Auditor of State's Fees \$ \_\_\_\_\_

Solicitor

210	Personal Services	
211	Salaries/Wages	\$ <u>10000</u>
212	Employee Benefits	_____
220	Travel Transportation	_____
230	Contractual Services	_____
240	Supplies and Materials	_____
250	Capital Outlay	_____
	Total Solicitor	\$ <u>10,000</u>

Other General Government

210	Personal Services	
211	Salaries/Wages	\$ _____
212	Employee Benefits	_____
220	Travel Transportation	_____
230	<i>Engineer</i> Contractual Services	<u>8600</u>
240	Supplies and Materials	_____
250	Capital Outlay	_____
	Total Other General Government	\$ <u>8600</u>

Total Program VII — General Government \$ 88,650

Other Uses of Funds

271	Transfers	\$ _____
273	Other Uses	_____

Total Other Uses of Funds \$ \_\_\_\_\_

SECTION 3. That there be appropriated from the GENERAL FUND for contingencies for purposes not otherwise provided for, to be expended in accordance with the provisions of Section 5705.40, R. C., the sum of

\$ \_\_\_\_\_

GRAND TOTAL GENERAL FUND APPROPRIATION

\$ 217,150

SECTION 4. That there be appropriated from the following SPECIAL REVENUE FUNDS.

Street Construction, Maintenance, and Repair Fund

PROGRAM VI -- TRANSPORTATION

Street Construction and Reconstruction

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Street Construction and Reconstruction \$ \_\_\_\_\_

Street Maintenance and Repair

210 Personal Services

211 Salaries/Wages *LED* \$ 25,500

212 Employee Benefits 6000

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials 3000

250 Capital Outlay \_\_\_\_\_

Total Street Maintenance and Repair \$ 34,500

Street Cleaning, Snow and Ice Removal

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Street Cleaning, Snow and Ice Removal \$ \_\_\_\_\_

Other Transportation

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Transportation \$ \_\_\_\_\_

Other Uses of Funds

271 Transfers \$ \_\_\_\_\_

273 Other Uses \_\_\_\_\_

Total Other Uses Funds \$ \_\_\_\_\_

Total for Street Construction,  
Maintenance and Repair Fund \$ 34,500

PROGRAM VI — TRANSPORTATION

State Highway and Improvement Fund

Street Construction and Reconstruction

210 Personal Services

211 Salaries/Wages <sup>100</sup> \$ 1600

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Street Construction and Reconstruction \$ 1600

Street Maintenance and Repair

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Street Maintenance and Repair \$ \_\_\_\_\_

**Sidewalks**

**210 Personal Services**

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

**Total Sidewalks** \$ \_\_\_\_\_

**Other Transportation**

**210 Personal Services**

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

**Total Other Transportation** \$ \_\_\_\_\_

**Other Uses of Funds**

271 Transfers \$ \_\_\_\_\_

273 Other Uses \_\_\_\_\_

**Total Other Uses of Funds** \$ \_\_\_\_\_

**Total for State Highway Improvement Fund  
Program IV — Transportation**

\$ 1600.

**CEMETERY FUND**

**PROGRAM II — PUBLIC HEALTH SERVICES**

**Cemetery**

**210 Personal Services**

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

**Total Cemetery** \$ \_\_\_\_\_



Other Uses of Funds

271 Transfers \$ \_\_\_\_\_  
273 Other Uses \_\_\_\_\_  
Total Other Uses of Funds \$ \_\_\_\_\_  
Total for State Grant Fund  
(Specify) Program \_\_\_\_\_ \$ \_\_\_\_\_

OTHER SPECIAL REVENUE FUNDS (Specify Fund)

(SPECIFY) PROGRAM PERMISSIVE TAX

Others (Specify)

210 Personal Services  
211 Salaries/Wages \$ \_\_\_\_\_  
212 Employee Benefits \_\_\_\_\_  
220 Travel Transportation \_\_\_\_\_  
230 Contractual Services \_\_\_\_\_  
240 Supplies and Materials \_\_\_\_\_  
250 Capital Outlay 6000 Issue #2  
Total Other (Specify Fund) \$ 6000.

Other Uses of Funds

271 Transfers \$ \_\_\_\_\_  
273 Other Uses \_\_\_\_\_  
Total Other Uses of Funds \$ \_\_\_\_\_  
Total for Other Special Revenue Funds  
(Specify) \_\_\_\_\_ \$ \_\_\_\_\_

LAW ENFORCEMENT TRUST FUND

PROGRAM I — SECURITY OF PERSONS AND PROPERTY

Police Law Enforcement

210 Personal Services  
211 Salaries/Wages \$ \_\_\_\_\_  
212 Employee Benefits \_\_\_\_\_  
220 Travel Transportation \_\_\_\_\_  
230 Contractual Services \_\_\_\_\_  
240 Supplies and Materials \_\_\_\_\_  
250 Capital Outlay \_\_\_\_\_  
Total Police Law Enforcement \$ \_\_\_\_\_

Other Uses of Funds

271 Transfers \$ \_\_\_\_\_

273 Other Uses \_\_\_\_\_

Total Other Uses of Funds \$ \_\_\_\_\_

Total for Drug Law Enforcement Fund  
Program I \$ \_\_\_\_\_

MOTOR VEHICLE LICENSE TAX FUND

PROGRAM VI — TRANSPORTATION

Street Construction and Reconstruction

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Street Construction and Reconstruction \$ \_\_\_\_\_

Other Transportation

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Transportation \$ \_\_\_\_\_

Other Uses of Funds

271 Transfers \$ \_\_\_\_\_

273 Other Uses \_\_\_\_\_

Total Other Uses of Funds \$ \_\_\_\_\_

Total for Motor Vehicle License Tax Fund  
Program VI \$ \_\_\_\_\_

GRAND TOTAL SPECIAL REVENUE FUND APROPRIATION

\$ 42,100.

SECTION 5. That there be appropriated from the following DEBT SERVICE FUNDS:

GENERAL OBLIGATION BOND FUND

(SPECIFY) PROGRAM Fire Truck Bond Retirement Fund

Principal \$ 7000.

Interest \$ 3000.

Other Debt Service \$ 9322.

Total Program — (Specify) — \$ 19,322.

(SPECIFY) PROGRAM — — —

Principal \$ —

Interest \$ —

Other \$ —

Total Program — (Specify) — \$ —

TOTAL FOR GENERAL OBLIGATION  
BOND FUND APPROPRIATION

\$ 19,322.

Other Debt Service Fund

(SPECIFY) PROGRAM — — —

Principal \$ —

Interest \$ —

Other \$ —

Total Program — (Specify) — \$ —

(SPECIFY) PROGRAM — — —

Principal \$ —

Interest \$ —

Other \$ —

Total Program — (Specify) — \$ —

Total for Other Debt Service Fund \$ —

GRAND TOTAL DEBT SERVICE  
FUND APPROPRIATIONS

\$ —

SECTION 6. That there be appropriated from the following CAPITAL PROJECTS FUNDS:

CONSTRUCTION FUND

(SPECIFY) PROGRAM \_\_\_\_\_

(Specify) \_\_\_\_\_ Construction Fund

250 Capital Outlay \$ \_\_\_\_\_

260 Debt Service \$ \_\_\_\_\_

270 Other Uses of Funds \$ \_\_\_\_\_

Other Construction \$ \_\_\_\_\_

Total Program \_\_\_\_\_ (Specify) \_\_\_\_\_ \$ \_\_\_\_\_

Total for Construction Fund  
(Specify) \_\_\_\_\_ Appropriation \$ \_\_\_\_\_

Federal Grant Fund (Specify) \_\_\_\_\_

(SPECIFY) PROGRAM \_\_\_\_\_

Federal Grant Fund (Specify) CETA

250 Capital Outlay \$ 6000

260 Debt Service \$ \_\_\_\_\_

270 Other Uses of Funds \$ \_\_\_\_\_

Other Federal Grant \$ \_\_\_\_\_

Total Program \_\_\_\_\_ (Specify) \_\_\_\_\_ \$ \_\_\_\_\_

Total for Federal Grant Fund  
(Specify) CETA Appropriation \$ 6000

Other Capital Projects Funds (Specify) \_\_\_\_\_

(SPECIFY) PROGRAM \_\_\_\_\_

Other Capital Projects (Specify) \_\_\_\_\_

250 Capital Outlay \$ \_\_\_\_\_

260 Debt Service \$ \_\_\_\_\_

270 Other Uses of Funds \$ \_\_\_\_\_

Other Capital Projects \$ \_\_\_\_\_

Total Program \_\_\_\_\_ (Specify) \_\_\_\_\_ \$ \_\_\_\_\_

Total for Other Capital Projects Funds  
(Specify) \_\_\_\_\_ Appropriation \$ \_\_\_\_\_

GRAND TOTAL CAPITAL PROJECTS FUND APPROPRIATION

\$ 6000

Other Special Assessment Improvement

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Special  
Assessment Improvement \$ \_\_\_\_\_

Other Uses of Funds

271 Transfers \$ \_\_\_\_\_

273 Other Uses \_\_\_\_\_

Total Other Uses Funds \$ \_\_\_\_\_

Total for Special Assessment  
Improvement Fund Appropriation \$ \_\_\_\_\_

Special Assessment Operating Funds (Specify) \_\_\_\_\_

(SPECIFY) PROGRAM Life Squad

Special Assessment Operation (Specify) \_\_\_\_\_

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services 5200

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Special Assessment  
Operation Project (Specify) Life Squad 5200.

Other Special Assessment Operation

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Special  
Assessment Operation \$ \_\_\_\_\_

Other Uses of Funds

271 Transfers \$ \_\_\_\_\_

273 Other Uses \_\_\_\_\_

Total Other Uses of Funds \$ \_\_\_\_\_

Total for Special Assessment Operating Fund  
(Specify) \_\_\_\_\_ Appropriation \$ \_\_\_\_\_

Other Special Assessment Fund (Specify) \_\_\_\_\_

(SPECIFY) PROGRAM \_\_\_\_\_

Special Assessment (Specify) \_\_\_\_\_

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Special Assessment \$ \_\_\_\_\_

Other Special Assessment Fund

210 Personal Services

211 Salaries/Wages \$ \_\_\_\_\_

212 Employee Benefits \_\_\_\_\_

220 Travel Transportation \_\_\_\_\_

230 Contractual Services \_\_\_\_\_

240 Supplies and Materials \_\_\_\_\_

250 Capital Outlay \_\_\_\_\_

Total Other Special  
Assessment Fund \_\_\_\_\_ \$ \_\_\_\_\_

Other Uses of Funds

271 Transfers \$ \_\_\_\_\_

273 Other Uses \_\_\_\_\_

Total Other Uses of Funds \$ \_\_\_\_\_

Total for Other Special Assessment Fund  
(Specify) \_\_\_\_\_ Appropriation \$ \_\_\_\_\_

GRAND TOTAL SPECIAL ASSESSMENT FUNDS APPROPRIATION \$ 5200

TOTAL ALL APPROPRIATIONS \$ 289,772

## ADDITIONAL SUPPORT INFORMATION

For Fiscal Year 1993, jurisdictions shall complete the State application form for Issue 2, Small Government, or Local Transportation Improvement Program (LTIP) funding. In addition, the District 2 Integrating Committee requests the following information to determine which projects are funded. Information provided on both forms should be accurate, based on reliable engineering principles. Do NOT request a specific type of funding desired, as this is decided by the District Integrating Committee.

1. Of the total infrastructure within the jurisdiction which is similar to the infrastructure of this project, what percentage can be classified as being in poor condition, adequacy and/or serviceability? Accurate support information, such as pavement management inventories or bridge condition summaries, must be provided to substantiate the stated percentage.

Typical examples are:

Road percentage=  $\frac{\text{Miles of road that are in poor condition}}{\text{Total miles of road within jurisdiction}}$

Storm percentage=  $\frac{\text{Miles of storm sewers that are in poor condition}}{\text{Total miles of storm sewers within jurisdiction}}$

Bridge percentage=  $\frac{\text{Number of bridges that are in poor condition}}{\text{Number of bridges within jurisdiction}}$

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40% roads in poor condition - 4.89 miles

---

25% storm sewers in poor condition - 7.00 miles

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2. What is the condition of the existing infrastructure to be replaced, repaired, or expanded? For bridges, submit a copy of the latest general appraisal and condition rating.

Closed	_____	Poor	<u>XX</u>
Fair	_____	Good	_____

Give a brief statement of the nature of the deficiency of the present facility such as: inadequate load capacity (bridge); surface type and width; number of lanes; structural condition; substandard design elements such as berm width, grades, curves, sight distances, drainage structures, or inadequate service capacity. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded.

The pavement is currently sliding as evidenced in the ATEC report.

This pavement is in dire need of repair.

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3. If State Issue 2 funds are awarded, how soon (in weeks or months) after completion of the agreement with OPWC would the opening of bids occur? The Integrating Committee will be reviewing schedules submitted for previous projects to help judge the accuracy of a particular jurisdiction's anticipated schedule.

Please indicate the current status of the project development by circling the appropriate answers below. PROVIDE ACCURATE ESTIMATE.

- |  |     |    |     |
|--|-----|----|-----|
| a) Has the Consultant been selected?.....            | Yes | No | N/A |
| b) Preliminary development or engineering completed? | Yes | No | N/A |
| c) Detailed construction plans completed?.....       | Yes | No | N/A |
| d) All right-of-way and easements acquired?.....     | Yes | No | N/A |
| e) Utility coordination completed?.....              | Yes | No | N/A |

Give estimate of time, in weeks or months, to complete any item above not yet completed.

Final design completed by March 31, 1992 and utilities completed

by April 6, 1992

4. How will the proposed infrastructure activity impact the general health, welfare, and safety of the service area? (Typical examples include the effects of the completed project on accident rates, emergency response time, fire protection, health hazards, user benefits, and commerce.)

This project is of important impact due to the fact that if Shady Lane slips, it will have to be closed and it carries a significant amount of traffic from Miami and Green Township, particularly in the new subdivision in Miami Township

5. For any project involving GRANTS, the local jurisdiction must provide a MINIMUM OF 10% of the anticipated construction cost. Additionally, the local jurisdiction must pay 100% of the costs of preliminary engineering, inspection, and right-of-way. If a project is to be funded under Issue 2 or Small Government, the costs of any betterment/expansion are 100% local. Local matching funds must either be currently on deposit with the jurisdiction, or certified as having been approved or encumbered by an outside agency (MRF, CDBG, etc.). Proposed funding must be shown on the Project Application under Section 3.2, "Project Financial Resources". For a project involving LOANS or CREDIT ENHANCEMENTS, 100% of construction costs are eligible for funding, with no local match required.

What matching funds are to be used for this project? (i.e. Federal, State, MRF, Local, etc.)

MRF

To what extent are matching funds to be utilized, expressed as a percentage of anticipated CONSTRUCTION costs?

10%



6. Has any formal action by a federal, state, or local government agency resulted in a complete ban or partial ban of the use or expansion of use for the involved infrastructure? (Typical examples include weight limits, truck restrictions, and moratoriums or limitations on issuance of new building permits.) THE BAN MUST HAVE AN ENGINEERING JUSTIFICATION TO BE CONSIDERED VALID. Attach a copy of the document (ordinance, resolution, etc.) which imposes the ban.

COMPLETE BAN \_\_\_\_\_

PARTIAL BAN \_\_\_\_\_

NO BAN \_\_\_\_\_XX

Will the ban be removed after the project is completed? YES\_\_\_\_\_ NO\_\_\_\_\_

7. What is the total number of existing users that will benefit as a result of the proposed project? Use specific criteria such as households, traffic counts, ridership figures for public transit, daily users, etc., and equate to an equal measurement of users:

5000 ADT x 1.2 = 6000 ADT

For roads and bridges, multiply current documented Average Daily Traffic by 1.2 occupants per car (I.T.E. estimated conversion factor) to determine users per day. Ridership figures for public transit must be documented. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by four (4) to determine the approximate number of users per day.

8. The Ohio Public Works Commission requires that all jurisdictions applying for project funding develop a five year overall Capital Improvement Plan that shall be updated annually. The Plan is to include an inventory and condition survey of existing capital improvements, and a list detailing a schedule for capital improvements and/or maintenance. Both Five-Year Overall and Five-Year Issue 2 Capital Improvement Plans are required.

Copies of these Plans are to be submitted to the District Integrating Committee at the same time the Project Application is submitted.

9. Is the infrastructure to be improved part of a facility that has regional significance? (Consider the number of jurisdictions served, size of service area, trip lengths, functional classification, and length of route.) Provide supporting information.

Village of North Bend, Miami Township, Mack and Bridgetown

OHIO INFRASTRUCTURE BOND PROGRAM (ISSUE 2) - ROUND 5  
LOCAL TRANSPORTATION IMPROVEMENT PROGRAM (LTIP) - ROUND 4  
FY 1993 PROJECT SELECTION CRITERIA - 7/1/92 TO 6/30/93

ADOPTED BY DISTRICT 2 INTEGRATING COMMITTEE, 2/21/92

JURISDICTION/AGENCY: NORTH BEND

PROJECT IDENTIFICATION: SHADY LANE

PROPOSED FUNDING:

ELIGIBLE CATEGORY:

POINTS

TOTAL POINTS FOR THIS PROJECT - \_\_\_\_\_

- 10 1) Type of project  
10 Points - Bridge, road, stormwater  
5 Points - All other projects
- 10 2) If Issue 2/LTIP funds are granted, when would the construction contract be awarded? (Even though the jurisdictions will be asked this question, the Support Staff will assign points based on engineering experience.)  
10 Points - Will definitely be awarded by end of 1992  
5 Points - Some doubt as to whether it can be awarded by end of 1992  
0 Points - No way it can be awarded in 1992
- 15 3) What is the condition of the infrastructure to be replaced or repaired? For bridges, base condition on latest general appraisal and condition rating.  
15 Points - Poor condition  
12 Points -  
9 Points - Fair to Poor condition  
6 Points -  
3 Points - Fair condition

**NOTE:** If infrastructure is in "good" or better condition, it will NOT be considered for Issue 2/LTIP funding, unless it is a **betterment** project that will improve serviceability.

2

- 4) If the project is built, what will be its effect on the facility's serviceability?

10 Points - Significantly effect on serviceability (e.g., widen to add lanes along entire project)  
8 Points - Moderate to significant effect on serviceability  
6 Points - Moderately effect on serviceability (e.g., widen existing lanes)  
4 Points - Little to no effect on serviceability  
2 Point - Little or no effect on serviceability (e.g., street or bridge deck rehab)

2

- 5) Of the total infrastructure within the jurisdiction which is similar to the infrastructure of this project, what portion can be classified as being in poor or worse condition, and/or inadequate in service?

3 Points - 50% and over  
2 Points - 30% to 49.9%  
1 Point - 10% to 29.9%  
0 Points - Less than 10%

8

- 6) How important is the project to the HEALTH, SAFETY, and WELFARE of the public and the citizens of the District and/or the service area?

10 Points - Highly significant importance, with substantial impact on all 3 factors  
8 Points - Considerably significant importance, with substantial impact on 2 factors OR noticeable impact on all 3 factors  
6 Points - Moderate importance, with substantial impact on 1 factor or noticeable impact on 2 factors  
4 Points - Minimal importance, with noticeable impact on 1 factor  
2 Points - No measurable impact

6

- 7) What is the overall economic health of the jurisdiction?

10 Points - Poor  
8 Points -  
6 Points - Fair  
4 Points -  
2 Points - Excellent

- 1 8) What matching funds are being committed to the project, expressed as a percentage of the TOTAL CONSTRUCTION COST? Matching funds may be local, federal, ODOT, MRF, etc. or a combination of funds. Loan and credit enhancement projects automatically receive 5 points. **MINIMUM 10% MATCHING FUNDS REQUIRED FOR GRANT-FUNDED PROJECTS**

5 Points - More than 50%  
4 Points - 40% to 49.9%  
3 Points - 30% to 39.9%  
2 Points - 20% to 29.9%  
1 Point - 10% to 19.9%

- 0 9) Has any formal action or orders by a federal, state, or local governmental agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure? Examples include weight limits on structures, EPA orders to replace or repair sewerage, and moratoriums on building permits in a particular area due to local flooding downstream. **POINTS CAN BE AWARDED ONLY IF CONSTRUCTION OF THE PROJECT BEING RATED WILL CAUSE THE BAN TO BE REMOVED.**

10 Points - Complete ban  
5 Points - Partial ban  
0 Points - No ban

- ~~2~~ 7 10) What is the total number of existing daily users that will benefit as a result of the proposed project? Appropriate criteria include traffic counts & households served, when converted to a measurement of persons. Public transit users are permitted to be counted for roads and bridges, but only when certifiable ridership figures are provided.

10 Points - 10,000 and Over  
8 Points - 7,500 to 9,999  
6 Points - 5,000 to 7,499  
4 Points - 2,500 to 4,999  
2 Points - 2,499 and Under

- ~~2~~ 11) Does the infrastructure have REGIONAL impact? Consider originations & destinations of traffic, functional classification, size of service area, number of jurisdictions served, etc. (Functional classifications to be revised in the future to conform to new Surface Transportation Act.)

5 Points - Major impact (e.g., major multi-jurisdictional route, primary feed route to an Interstate, Federal-Aid Primary routes)  
4 Points -  
3 Points - Moderate impact (e.g., principal thoroughfares, Federal-Aid Urban routes)  
2 Points -  
1 Point - Minimal or no impact (e.g., cul-de-sacs, subdivision streets)

**TOTAL AVAILABLE POINTS: 98**